

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Keisuke MATSUI et al.	)	Confirmation No.: 1575
	)	
U.S. Application No.: 10/583,084	)	Group Art Unit: Unassigned
	)	
Filed: June 15, 2006	)	Examiner: Unassigned
	)	
For: ARACHIDONIC ACID-CONTAINING PLANTS	)	
AND USE OF THE PLANTS	)	

Commissioner for Patents  
U.S. Patent and Trademark Office

Customer Window Mail Stop: ☐ New Application ☒ Amendment ☐ AF ☐ Issue Fee  
Alexandria, VA 22314

Sir:

**INFORMATION DISCLOSURE STATEMENT (IDS)**

☒ **Under 37 C.F.R. § 1.97(b):** Pursuant to 37 C.F.R. §§ 1.56 and 1.97(b), Applicant brings to the attention of the Examiner the documents listed on the attached PTO Form 1449. To the undersigned's knowledge, this IDS is being filed before the mailing date of a first Office Action on the merits, before the mailing date of a first Office Action on the merits after filing an RCE under § 1.114, or within three months of the application filing date.

☐ **Under 37 C.F.R. § 1.97(c):** Pursuant to 37 C.F.R. §§ 1.56 and 1.97(c), Applicant brings to the attention of the Examiner the documents listed on the attached PTO Form 1449. This IDS is being filed after the events recited in § 1.97(b) but, to the undersigned's knowledge, before the mailing date of a Final Office Action, a Notice of Allowance, or another action that closes prosecution in the application.

☐ The fee of \$180.00 set forth in § 1.17(p) is included herein; or

☐ Applicant submits that each item of information contained in this IDS was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this IDS.

☐ **Under 37 C.F.R. § 1.97(d):** Pursuant to 37 C.F.R. §§ 1.56 and 1.97(d), Applicant brings to the attention of the Examiner the documents listed on the attached PTO Form 1449. This IDS is being filed after the events recited in § 1.97(c) but before payment of the issue fee.

☐ The fee of \$180.00 set forth in § 1.17(p) is included herein; and

☐ Applicant submits that each item of information contained in this IDS was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this IDS.

☐ **Under 37 C.F.R. § 1.97(i):** Pursuant to 37 C.F.R. §§ 1.56 and 1.97(i), Applicant brings to the attention of the Examiner the documents listed on the attached PTO Form 1449. This IDS is being filed after the events recited in § 1.97(d). Applicant requests that the IDS be placed in the file.

☐ A search report or other listing of documents from a counterpart, related, or other application dated \_\_\_\_\_ and having documents cited thereon is attached for the Examiner's consideration. Any of these documents not previously cited, and any additional documents are listed on the PTO Form 1449.

☒ Applicant respectfully requests that the Examiner consider the listed documents and evidence that consideration by making appropriate notations on the attached form. As for any document listed on the accompanying PTO-1449 that is in a language other than English, relevance can be understood from an enclosed English abstract or at least partial translation or from mention in the specification or in a search report for a corresponding application.


This submission does not represent that a search has been made or that no better art exists and does not constitute an admission that any of the listed documents are material or constitute "prior art." If it should be determined that any of the listed documents do not constitute "prior art" under United States law, Applicant reserve the right to present to the Office the relevant facts and law regarding the appropriate status of such documents.

Applicant further reserves the right to take appropriate action to establish the patentability of the disclosed invention over the listed documents, should any of the documents be applied against the claims of the present application.

Except for issue fees payable under 37 C.F.R. § 1.18, the Commissioner is hereby authorized by this paper to charge any additional fees during the entire pendency of this Application, including fees due under 37 C.F.R. § 1.16 and 1.17 which may be required and including any required extension of time fees, or credit any overpayment to Deposit Account No. 50-0573. This paragraph is intended to be a CONSTRUCTIVE PETITION FOR EXTENSION OF TIME in accordance with 37 C.F.R. § 1.136(a)(3).

Respectfully submitted,

**DRINKER, BIDDLE & REATH LLP**

  
Mercedes K. Meyer, Ph.D., Esq.  
Registration No. 44,939

Dated: May 25, 2007

**CUSTOMER NO. 055694**  
**DRINKER, BIDDLE & REATH LLP**  
1500 K Street, N.W., Suite 1100  
Washington, D.C. 20005-1209  
Tel: 202.842.8800; Fax: 202.842.8465

<b>INFORMATION DISCLOSURE CITATION</b> (Use several sheets if necessary)				Attorney Docket No.: 47236-0007		Serial No.: 10/583,084	
				Applicants Keisuke MATSUI et al.		Page 1 of 1	
<b>PTO Form 1449</b>				Filing Date: June 15, 2006		Group Art Unit: Unassigned	
<b>U.S. PATENT DOCUMENTS</b>							
*Examiner Initial		Document Number	Date	Name	Class	Sub Class	Filing Date
<b>FOREIGN PATENT DOCUMENTS</b>							
		Document Number	Date	Country	Class	Sub Class	<b>Translation</b> YES NO
<b>OTHER DOCUMENTS</b>							
(Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.)							
		Toshihiko Niina et al., "Plant Metabolic Engineering", NTS Inc, pp 574-586, June 25, 2002, [ Japanese language and partial translation]					
		Yoshikazu Tanaka, "Production of Polyunsaturated Fatty Acids in Soybeans", Material of 8 <sup>th</sup> workshop in 160 <sup>th</sup> committee on Biotechnology for Global Environment, Foods and Resources, Japan Society for the Promotion of Science, pp. 14-16, June 13, 2003 [ Japanese language and partial translation]					
		Yoshikazu Tanaka et al., "Research and Development of Polyunsaturated Fatty Acid-Producing Soybeans", Suntory Limited, A Report on the Results of Research and Development on Biomass Energy Utilization Rationalization Industrial Technology, pp. 1-16, November 5, 2002					
		Yoshifumi Shinmen et al., "Production of Arachidonic Acid by <i>Mortierella</i> Fungi", Applied Microbiology Biotechnology, Vol. 31, pp. 11-16, 1989					
		DS Knutzon et al., "Modification of Brassica Seed Oil by Antisense Expression of a Stearoyl-Acyl Carrier Protein Desaturase Gene", PNAS, Vol. 89, pp. 2624-2628, April 1992					
		Olga Sayanova et al., "Expression of Borage Desaturase cDNA containing an N-terminal cytochrome b5 domain results in the accumulation of high levels of Delta 6-desaturated fatty acids in transgenic tobacco", PNAS, Vol. 94, pp. 4211-4216, April 1997					
		Hjördis Drexler et al., "Metabolic Engineering of Fatty Acids for breeding of new oilseed crops: strategies, problems and first results", Journal of Plant Physiology, Vol. 160, pp. 779-802, 2003					
		Ian E. Burbulis et al., "Interactions Among Enzyme of the Arabidopsis flavonoid biosynthetic pathway", PNAS, Vol. 96, No. 22, pp. 12929-12934, October 26, 1999					
		Jitao Zou et al., "Modification of Seed Oil Content and Acyl Composition in the Brassicaceae by Expression of a Yeast sn-2 Acyltransferase Gene", The Plant Cell, Vol. 9, pp. 909-923, June 1997					
		Toni A. Voelker et al., "Fatty Acid Biosynthesis Redirected to Medium Chains in Transgenic Oilseed Plants", SCIENCE, Vol. 257, pp. 72-74, July 3, 1992					
		Michael G. Koziel et al., "Field Performance of Elite Transgenic Maize Plants Expressing an Insecticidal Protein Derived from <i>Bacillus thuringiensis</i> ", Bio/Technology, Vol. 11, pp. 194-200, February, 1993					
		Eliane R. Santarém et al., "Transformation of Soybean [ <i>Glycine Max</i> (L.) Merrill] Using Proliferative Embryogenic Tissue Maintained on Semi-Solid Medium", In Vitro Cell. Dev. Biol.-Plant, vol. 35, pp. 451-455, November-December 1999					
		Search Report from International PCT Application No. PCT/JP2004/018638 mailed 2/1/2005					
Examiner					Date Considered		
Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.							